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Kwik-Kap Metal Roof Fastener Seals

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KWIK-KAP METAL ROOF FASTENER SEALS

THE NEED

Metal roof leaks cause damage to insulation and energy loss, structural damage that deteriorates supporting beams and damage to building contents. The major cause of metal roof leaks is fastener movement. Thermal shock (contraction & expansion of metal panels) is the biggest cause of fasteners loosening and backing out. This panel movement causes fastener holes to elongate. As this loosening progresses the metal panels lift allowing moisture to travel along the panel edge causing leaks that are very hard to detect and repair, as sometimes the leaks appear far from their source. The Kwik-Kap method stops leaks by preventing fastener back-out, creates a consistent appearance, eliminates unreliable caulking, reduces labor and requires no drying time.

FIGURE 1 KWIK-KAP METAL ROOF FASTENER SEALS

THE TECHNOLOGY

The Kwik-Kap is an aluminum faced conforming disc with a heavy modified asphalt base. This proven material has survived more than 100,000 cycles with no signs of cracking or other failure. This asphalt/polymer compound assures a supple, self-sealing barrier engineered for maximum long term performance. Kwik-Kap is reinforced with special high-density polymer films, which provide extraordinary tear strength, plus

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elongation values of up to 300%. The aluminum foil reflects heat and ultra violet light, which prematurely damages other materials.The Kwik-Kap procedure is simple with its accompanying tool. The Kwik-Kap tool was developed with a two-stepped cavity. The smaller cavity insures a tight seal around the fastener head. The larger cavity then seals the washer perimeter, and the outer surface of the tool seals the entire disc in a matter of seconds leaving an attractive and paintable seal. Simply place the Kwik-Kap disc over the head of the fastener, center the tool, push and twist.

The procedure of application is following as:

1. Thoroughly clean surface around fastener, removing all oil, dirt, grease, chalking, loose rust, mold, mildew, loose paint, and foreign material, leaving a clean dry surface with only tightly adhering paint & rust
2. Tighten or replace all worn fasteners before applying Kwik-Kaps.Bend Kap to center over fastener head, apply then straighten to original shape.
3. Center Tool, push down hard, then twist & rock Kwik-Kap tool

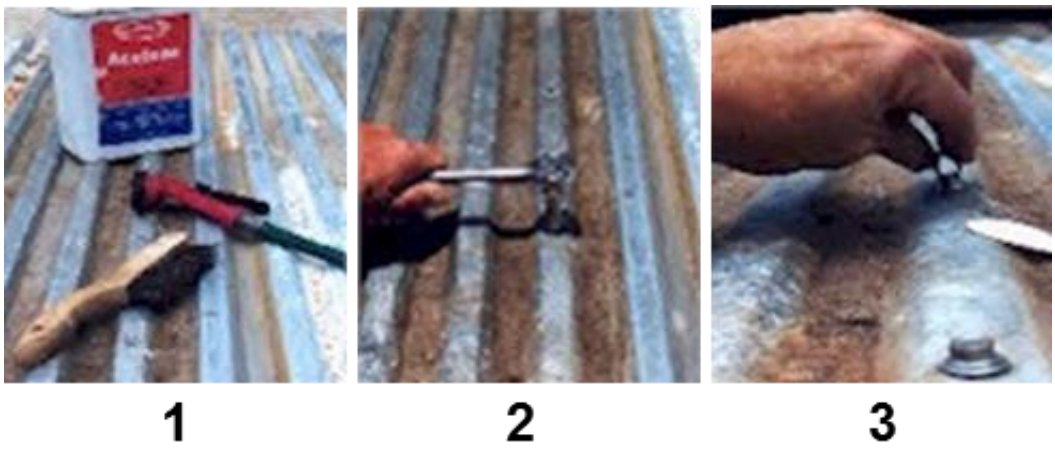

FIGURE 2 PROCEDURE OF APPLICATION

Property of Kwikkap

- Thickness: 45 MILLS
- Tear Strength: 640 G
- Elongation: 380 %
- Application Temperature: 60 - 110F
- Service Temperature: -25 - 150F

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The Benefits

- Covers and seals elongated holes caused by contraction and expansion
- Prevents fastener backout, the major cause of roof leaks
- Stops metal roof leaks, rust and screw movement
- Reduces fastener replacement
- Prevents UV weathering of neoprene washers
- Creates a consistent fastener appearance
- Eliminates drying time

Status

Kwik-Kap has been on the market for over six years, while applied extensively in commercial, industrial and agricultural applications in all climates with no failures. Patent numbers: 6,036,804. 5,419,666 and other patents pending.

Barriers

Surface must be clean, dry and free of grease and oil.

Points of Contact

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References

1. Kwik-Kap Co. http://www.kwik-kap.com

Reviewers

Peer reviewed as an emerging construction technology

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